Annex 002

To Memorandum of Agreement
Between
DOT/FAA and NASA Concerning
Wake Turbulence Research and Development

FAA Analysis and Modeling Support to NASA's Wake Vortex Projects and the Airspace Systems Program

<u>Task Statement:</u> The FAA shall provide analysis and modeling support to Wake Vortex Projects and the Airspace Systems Program to assist the NASA in accurately modeling the wake effects of aircraft, especially the A380, as they effect the design of the National Airspace System.

<u>Period of Performance:</u> 4/15/2004 – 9/30/2006. It is expected that this work will be continued by subsequent task orders. Payment provisions will be as per the provisions of the Intergovernmental Procurement Request and Paragraph 4.B (1) of MOA FNA/07-04-01.

<u>Funding:</u> Planned funding for this task will be increments of \$250,000. The first allocation is to be in FY-04 and the second in FY-05. Subsequent task orders will provide separate funding plans.

Description of the Task: Memorandum of Agreement FNA/07-04-01 encourages mutual NASA/FAA support in determining the effect of the wake turbulence profile of each newly introduced aircraft in the National Airspace System. The NASA is supporting national development of new concepts and technology for the next generation of air traffic control. To facilitate this work, NASA requires modeling of the wake turbulence created by aircraft and an assessment of the wake-associated hazards. The FAA has the modeling and assessment capability to accomplish this work for aircraft presently being flown in the National Airspace System. This task provides for the extension of this FAA capability to new aircraft types that will be introduced into National Airspace System within the next ten years. The enhanced modeling capability and analyses will provide essential information to the NASA as it develops improved air traffic control operational concepts and technology for the future.

The requested support is as follows:

1. Upgrade the FAA hazard analysis modeling capability for new aircraft types for which approval for entry into commercial service is being sought in the next ten years. Provide this analysis capability for use by NASA in the design of improved air traffic control operational systems.

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- 2. Analyze flight characteristic information for newly introduced aircraft that have been provided by manufactures seeking approval for commercial service in the National Airspace System.
- 3. Recommend appropriate separation standards for use by the NASA in the design of the next generation air traffic control system.

Deliverables:

- 1. Upgraded FAA hazard analysis modeling capability. Expected completion date is 9/30/06.
- 2. Analyses, reports and recommendations describing the upgrade efforts and the review of flight characteristic information packages from aircraft manufacturers and associated supporting organizations. Delivery dates are variable and to be based upon the amount of information provided to the FAA for analysis.

APPROVED:

DOT/Federal Aviation Administration Flight Standards Service

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Date

May 26, 2004

Date